

## APPENDIX

NOVEMBER 15, 1994

The dollar moved sharply lower in mid-October following the German elections and the passing of what were perceived as opportunities for the Federal Reserve to raise rates on U.S. economic data releases. As the dollar appeared to begin moving lower again in early November, the Desk intervened on Wednesday, November 2nd and Thursday, November 3rd.

Following the Committee's last meeting, the dollar rose against the yen in anticipation of, and following, the September 30th announcement of interim agreements and disagreements in the U.S.-Japan trade talks. However, by the time the dollar moved above 100 yen on October 7, long-dollar positions -- both speculative and of Japanese exporters -- began to be sold against the yen and the mark. Around the same time, German capital markets appeared to rally in anticipation of a Kohl victory in the October 16th German federal election and this rally provided a basis for traders to anticipate a repetition of the mark's strength which followed the June European elections.

As the dollar has moved lower, it appears that market participants have been seeing the dollar's glass half empty but the mark's glass as half full. They frequently cite the views that: the German economy is strong,

and U.S. interest rates are too low. Few focus on the other

side of these equations: that the U.S. economy is strong; that the German economy's strength is export led;

and that U.S. rates are likely to go higher while German rates are likely to remain at current levels.

The strong, negative sentiment toward the dollar in October reflects two things: first, the single, dominant fact and factor in exchange markets in 1994 has been the dollar's weakness and, second, whatever the proximate cause or trigger of the dollar's decline in any given month, market participants increasingly associate the dollar's weakness with the stance of monetary policy.

In the relationships among the dollar, the mark and the yen, it is unmistakable that the dollar's weakness has been the dominant factor in 1994 -- not the strength of the mark or the yen. Those who have ignored the combined weight of the U.S. trade and current account deficits, the global portfolio diversification of U.S. savings, and the negative foreign perception of the Clinton Administration, have done so at some cost.

Based on their experience this year, most market participants believe that, in the absence of an equal and opposite force, the trend of dollar weakness is likely to continue and to be self-sustaining. While there are a number

of fundamental and transient factors contributing to the dollar's movements lower, taking these factors as given, market participants increasingly focus on the stance of U.S. monetary policy as the reason why the dollar is not higher.

Putting aside the question of whether current rates are sufficient to stave off increased inflation one or two years from now, there are at least three related, but distinct, "curves" that foreign exchange market participants perceive the Fed as being behind:

First, rates are not yet high enough to provide true symmetry to the perceived risks of future increases and decreases and, thus, are not yet high enough to provide adequate stability to the bond market to induce foreign demand;

Second, rates are not yet high enough for the level of real bond yields, relative to the level of real foreign bond yields, to induce foreign demand; and

Third, rates are not yet high enough in the short-end to give the dollar an adequate cost-of-carry advantage against the mark to induce speculative accounts and corporate accounts to hold unhedged dollar positions and deposits.

In short, while the exchange market may or may not be the best measure of reality or guide for monetary policy, from the exchange market's point of view, Federal reserve policy only made it to neutral in August, when the Board's and the Committee's actions brought U.S. overnight rates within effective parity of German overnight rates. With the gear box in neutral for the last three months, momentum alone would have been enough to keep the dollar moving lower along its pre-existing trend.

However, during the middle two weeks of October, the series of U.S. data releases provided an opportunity when many in the market thought the Federal Reserve might raise rates. When these data releases came and went without any policy action, the perception that interest rate policy is "responsible" for the dollar's continued weakness appeared to be vindicated, adding momentum to the dollar's movement lower on the weight of the long-dollar positions being closed out and the mark's strength following the German election.

From October 11th, the dollar dropped more than 3 and a half percent against the mark in just 10 trading days, returning to a two-year low [1.4860] on October 25th, and dropped by over four percent against the yen in 16 trading days, reaching a new historic low of 96.11 yen on November 2nd.

In thin markets, with the dollar grinding lower, there appeared to be a risk that the dollar would slide into new, lower ranges. This risk appeared particularly acute on Wednesday, November 2nd as the dollar reached its new, historic low against the yen.

Our joint operation with the Treasury sought, first, to stop the momentum of the steady move lower, through a reminder of two-way risk, in the hope of minimizing the extent to which the dollar's decline would be self-sustaining and, second, to underscore the policy objective of a strong dollar. The second operation on Thursday, November 3rd, was intended to put an exclamation point behind the policy objective of a stronger dollar by disassociating our actions from particular levels and from the recent practice of intervening for one-day only.

The operation was modestly successful, both in reawakening a sense of two-way risk and in underscoring the policy goal. In this regard, I think the market was as interested in the operation as an indication of the Federal Reserve's commitment to a stronger dollar as it was in a reaffirmation of the Treasury's commitment. As I hoped, acting without European central banks was perceived by many as a positive factor: the issue is not whether a dozen or so European central banks care enough to give a nod to a stronger dollar; rather, the issue is whether the U.S. monetary authorities care enough to stand up by themselves.

When we did not intervene on Friday, November 4th, the dollar came off somewhat, returning to the levels of Wednesday's close. The U.S. election results triggered a burst of dollar buying out of Europe and then a rush by the dealer community to close short positions. The dollar also moved a bit higher on last Thursday's PPI number and, again, rose one and a half pfennings and almost one yen on Monday, to close yesterday at approximately the levels last seen in mid-October.

I think the "pep" the dollar has shown in the last few days can be attributed to several factors. First, the dealer community has been surprised several times now in recent weeks: by our intervention; by the strength of the European market reaction to the U.S. election as well as by the strength of the election results themselves; and by last week's PPI release. Each of these surprises has proved costly to those with short positions. Second, as this meeting has approached, there appears to have been dollar buying "on the rumor" of a rate increase. Finally, reflecting on the three different measures of the interest rate "curves" which the foreign exchange market perceives the Fed as being behind, some in the market seem prepared to anticipate the possibility that the Fed is within striking distance of moving onto, or even ahead of, one or more of these curves.

On a separate matter, I should note that the Mexican peso has come under considerable pressure in the last few days. Last

week, following rather good government auctions, the markets turned negative. AT&T announced a billion dollar telecommunications joint venture with a firm that would be competing with Telmex. Instead of focusing on the vote of confidence implied for the Mexican economy by such an investment, the Mexican stock market responded sharply when a U.S. dealer dropped Telmex from its recommended list; Telmex then lost 8 and a half percent of its value, dragging the stock market almost five percent lower. Also, over the last three days of last week, a firm with one of the major speculative positions in the peso and Mexican government paper began to cut back its positions, apparently trying to get out well ahead of the year-end. Yesterday, the peso was trading

Mr. Chairman, I would be happy to answer questions.

I will need the Committee's ratification of our operations: on Wednesday, November 2nd, we sold 400 million dollars worth of Japanese yen and 400 million dollars worth of German marks for the System's account. On Thursday, November 3rd, we sold 250 million worth of yen and 250 million worth of marks for the System's Account. Thus, over the period, for the System Account, we sold 650 million worth of yen and 650 million worth of marks.



Mr. Chairman, the System's reciprocal currency arrangements come up for renewal at this time of year, with the exception of our Mexican and Canadian governments. I have no changes in the terms and conditions of the existing swap arrangements to suggest and I request that the Committee approve their renewal without change.

Notes for FOMC Meeting  
November 15, 1994  
Joan E. Lovett

Our operations during the intermeeting period were designed to maintain the degree of reserve pressure in place since August, consistent with Federal funds trading around 4 3/4 percent. The borrowing allowance was reduced by a total of \$250 million in six steps, to reflect steady declines in the seasonal portion which typically occur at this time of year. The allowance currently stands at \$225 million. Adjustment borrowing ran very light through most of the interval, but jumped to over \$1 1/2 billion last Wednesday when banks found themselves short on a settlement day. Absent that occasion, adjustment borrowing averaged \$22 million. Total borrowing came in a bit under the formal allowance over much of the period as the technical adjustments tended to lag the actual decline in the seasonal component.

The Desk faced a small need to add reserves at the start of the interval. Shortages were projected to expand modestly over the next two periods, and then were expected to jump in the period now underway when currency would begin to surge as we approached the holiday season.

Currency has been expanding at a pace exceeding our earlier expectations, deepening the actual reserve shortages faced over the interval. The effects of our recent foreign exchange activities further reduced reserve supplies in the

current period, although successive downward revisions to required reserves stemming from persistent weakness in  $M_1$  deposits have been partially offsetting.

The Desk made frequent use of temporary operations to provide reserves over the interval. Altogether we arranged eight multi-day System RPs, most for fixed term, and ten operations spanning just one business day, mostly customer RPs.

Around the middle of the interval, we began to acquire securities from foreign accounts to help meet the deeper reserve shortages that were beginning to emerge. Altogether about \$1.9 billion of bills and coupons were purchased from these accounts. And last Wednesday, we bought nearly \$4 billion of bills in the market to pare the substantial deficiencies in the period in progress. This was our fifth outright market entry this year, our second for bills.

With currency expected to continue climbing through the year-end, another market purchase will be needed in upcoming weeks. Right now, we expect our normal \$8 billion of intermeeting leeway to be sufficient to see us through the next period. However, there are considerable uncertainties in the outlook, so a possible need for additional leeway cannot be entirely ruled out.

The effective funds rate over the interval averaged 4.79 percent, and rates generally remained close to their intended level. Conditions firmed to about 5 1/2 percent over the September 30 quarter-end date. More recently, funds touched

20 percent on last Wednesday's settlement date when banks found themselves a little short at the period's close, and they remained to the firm side in the current maintenance period reflecting the consensus view that a rate hike is imminent.

In the securities markets, interest rates rose substantially further over the intermeeting period, driven higher by accumulating evidence that the economic expansion was forging ahead, cutting into remaining capacity and threatening to intensify inflation pressures. Treasury coupon yields rose a net 25 to 50 basis points, accompanied by some flattening of the coupon yield curve, and bill rates rose about 50 basis points. Participants are feeling somewhat shell-shocked by the market's downward course over the past ten months, and many now seem intent to just wait out the balance of the year.

Throughout the period, analysts were impressed by the continued signs of strength in the manufacturing sector and by the apparent resilience of the housing market in the face of the interest rate hikes already in place. By most measures, the labor market also showed signs of tightening up, even though the reported payroll gains were on the low side of expectations. At this juncture, most market analysts see real GDP growing at about a 4 percent pace in the fourth quarter, slipping only modestly in the first quarter of 1995. Meanwhile, worrying trends in the more forward looking price indicators continued, and many investors have become convinced that it is only a matter of time before these pressures will begin to show through to final goods.

The dollar weakened partly as a result of these same concerns, which reinforced the upward climb in yields. By late October, the most recent long bond closed above 8 percent in yield for the first time since the spring of 1992, and its yield has risen somewhat further above that level in later trading.

Rate movements over the interval were not all one way, however. With market participants defensive, some of the data releases pressed against short positions. In particular, the third quarter aggregate deflators and recent monthly price statistics showed that current inflation appeared restrained, which caused yields to fall back.

The market faced a fairly heavy schedule of new Treasury supply, which added to the upward pressure on yields. Altogether, a net \$23 billion was raised in the coupon sector, which was held down somewhat by the absence of a long bond at the midquarter refunding auctions which are settling today. Both legs of the refunding went reasonably well as rates backed up sufficiently in the days leading up to the auctions. Another \$45 billion was raised in bills, including \$27 billion from two cash management bills designed to bridge intra-quarter financing gaps. Issuance in other sectors was generally light, particularly nontaxable offerings. However, market supplies were nonetheless heavy as selling by municipal bond funds to meet redemptions and to square accounts for tax purposes ahead of the fiscal and calendar year-ends caused this sector to erode substantially in recent weeks.

The outlook for monetary policy has been a matter of intense speculation in the market throughout the past interval. Markets actively debated the need for the Fed to accelerate the pace of tightening and, at times, participants entertained the possibility of an intermeeting adjustment in rates. Some of the less robust economic statistics and the well-behaved aggregate price data eventually persuaded most participants that no policy move was likely before today's meeting. At this point, the body of recent economic evidence has convinced analysts that a hike in rates of at least 50 basis points at today's meeting is all but certain. Beyond that, some are now looking for even more forceful action, taking the form of a larger immediate rise in rates and/or an aggressive statement of vigilance. The prevailing view is that further upward rate adjustments are in store. A cumulative increase of about 75 to 100 basis points in the funds rate by the end of the year appears to be built into the current yield structure, and additional rate increases are projected for 1995.

Michael J. Prell  
November 15, 1994

FOMC BRIEFING

The economic news since the last meeting has been almost uniformly good. Employment, output and sales have been growing rapidly; the unemployment rate has fallen further; and broad measures of inflation have remained subdued. Yet, there is seemingly little happiness in the securities markets: Despite the stability of the federal funds rate, bond yields have broken out into new high ground, and stock prices have languished in the face of strong earnings reports. Clearly, as Peter has noted, traders have been afflicted with the same concern that the staff implicitly expressed in the Greenbook, which is that the System has fallen behind the curve in imposing enough restraint to head off a step-up in inflation.

I won't take the time to review all of the data reported in the Greenbook. I want just to highlight and update a few points in our analysis of the current situation.

First, the figures that have come in since the BEA published its advance estimate of third-quarter GDP have raised final sales appreciably and lowered inventories about equally. So, on net, the real GDP gain appears still to be somewhat above the 3 percent pace we had projected at the last meeting.

Second, the labor market data for the current quarter are strong. Looking at them alone, our guess that GDP might be increasing 4 percent could be said to be conservative. Indeed, one cannot rule out another burst of growth, such as we had in the final quarters of the past two years.

Third, the advance report on retail sales for October that was released this morning provides the first major slug of expenditure-side information for the quarter. It indicates that nonauto sales rose six-tenths of a percent in October. When coupled with the earlier data on unit sales of motor vehicles, this news is consistent with our expectation that consumer spending will be up strongly this quarter.

Fourth, our forecast for GDP growth this quarter is higher than those of many private analysts. For example, the latest Blue Chip "consensus" is 2.7 percent. In most instances, I think a major source of the difference is simply that our forecast was not completed until after the October labor market data were released. But also important in some cases is a different assessment of the inventory situation. Many other analysts are anticipating a much sharper drop-off in inventory investment this quarter. As I noted, however, recent data suggest that the pace of accumulation in the third quarter may have been less rapid than BEA estimated--again, something forecasts issued prior to the Greenbook might have missed. Moreover, given the prevailing favorable sales expectations and tighter supply conditions, we don't think businesses will be anxious to trim their inventory-sales ratios in the near term.

Fifth, on the price side, the only news since the Greenbook is the October report on producer prices. The half-percent declines in the overall and core PPIs for finished goods were a pleasant surprise, while the further seven-tenths rise in the index for intermediate goods excluding food and energy was in line with our forecast. As has been widely reported, the plunge in the finished goods measures was attributable, arithmetically, to a large decline in car and truck prices--which seems to have reflected at least in part



quirks of seasonal adjustment at model change-over time. Viewed in that context, the PPI report basically was consistent with the notion that finished goods prices have been rising only gradually, despite mounting pressures from materials costs.

As you know, the central message in the staff forecast is that this inflation picture is about to change. The shift we are predicting is not dramatic, because we believe that the overshooting in resource utilization that has occurred thus far is not huge, and--absent some external shock--wages and prices normally accelerate gradually in such a circumstance. But, unless there is an easing of pressures on resources, inflation will tend to gather speed.

The Greenbook projection was designed to give you our sense of what it would take in the way of monetary policy action to nip the pickup in inflation in the bud and restore a slight disinflationary tilt in 1996. To be sure, enough time probably has not passed for all--or even most--of the effects of earlier tightening actions to have manifest themselves. But, that said, the strength of expenditure trends to this point is impressive; it could well be that the underlying growth tendencies against which policy is leaning are stronger than we had anticipated. Moreover, it is clear that some of the normal channels through which monetary restraint might be transmitted to demand are not operating in that direction: The dollar has depreciated, bolstering demand for our exports. And, banks have been easing, not tightening, various lending terms and standards in the face of rising rates.

As we noted in the Greenbook, a moderation of inventory building does appear likely to be a factor damping aggregate demand in the coming quarters. But we don't think this in itself will be enough to hold growth below potential for long. And with some impetus coming

from the external sector, it will be necessary to bring about a marked deceleration of domestic final demand. Thus it is that, in formulating our projection, we've assumed that the funds rate will increase about 1-1/2 percentage points over the next few months. We don't pretend to any precision in our estimation of the needed tightening; we are mainly signaling our assessment that substantial further action likely will be needed to achieve the kind of slowing in demand growth that we've outlined.

November 15, 1994

FOMC Briefing  
Donald L. Kohn

The decision facing the Committee at this meeting would seem to be not whether to raise interest rates but by how much. The persistent strength of aggregate demand, the high level of output relative to estimates of its potential, and continuing signs of price increases at early stages of production suggest considerable risks of higher inflation, even if much of the effects of earlier increases in interest rates have yet to be felt.

At its current level, the real federal funds rate, measured using backward-looking inflation to proxy for expectations, is around its post-Accord average. However, above-average interest rates may be needed to counteract the expansionary impact of other forces in financial markets working on the economy. As Mike noted, these include the drop in the dollar this year, easing credit conditions at banks and continuing ample availability of funds in open markets, and fairly high levels of equity prices holding down the cost of capital and buoying wealth. Even real long-term rates, while likely increasing appreciably over the past year, are only back up to the levels of the second half of the 1980s and well below the fiscal stimulus period of the early 1980s. In these circumstances, and with demand

not showing much sign of moderating, some action seems to be necessary to bring the economy back to its potential.

The greenbook forecast embodies a policy strategy that moves interest rates into what is thought to be a restrictive range, one consistent with reducing output to below its potential for a period. The need for this degree of restraint arises from the judgment that the economy probably has already overshot potential, setting in train a process leading to higher inflation. In this circumstance, merely returning the economy to its potential could well involve accepting a sustained uptick in the rate of inflation.

Containing inflation is likely to be more costly--in terms of output foregone--and will require higher nominal interest rates, if inflation expectations increase. Indeed, it may be that when, as now, inflation is low by the standards of recent decades, expectations may be especially prone to such upward revisions. Financial markets seem to be providing evidence of such an adjustment. Weakness in the dollar over much of the intermeeting period in the face of appreciable increases in nominal dollar interest rates and smaller increases in rates abroad suggests that the outlook for U.S. inflation may have deteriorated. While surveys of households and of business economists do not indicate a rise in such expectations, they do indicate that

inflation is expected to be higher. Moreover, the willingness of households and businesses to spend is not consistent with a view that real rates have been driven to unusually elevated levels by financial markets.

The bluebook discussed two options for tightening policy--federal funds rate increases of 50 and 75 basis points. On the view that the difference between these two will not have a perceptible effect on the economy, and given the possibility that rates will need to be raised ultimately by more than 75 basis points, the choice between them would seem to come down to a question of short-run tactics. A 50 basis point increase would about keep pace with market expectations. As a consequence, interest and exchange rates are unlikely to react very strongly to this action. It would be perceived as another, reasonably routine, step in an ongoing sequence of policy tightenings. In the absence of a flare-up in inflation of final goods and services, the Committee might view the need for more forceful action as not yet firmly established. Awaiting further data before tightening by more might seem especially attractive in light of uncertainties about the level of economic potential and the response of the economy to previous increases in interest rates. The recent favorable readings on broad measures of inflation may suggest that even if economic strength persists, the Committee has some flexibility in the timing

of its actions before a major pickup in inflation becomes embedded in the wage and price setting process. However, absent an unexpected moderation in demand, markets are likely to believe that additional tightening of like magnitude will be forthcoming in December. And, adverse data--suggesting emerging price pressures further along the production process or outsized gains in spending--could renew questions about whether policy was acting forcefully enough to contain inflation. Nonetheless, over time, a series of 50 basis points steps ultimately should damp inflation and inflation expectations and lead to a rally in bond markets, as in the staff forecast.

A 75 basis point increase in the federal funds rate might be chosen in part to counter inflation expectations somewhat sooner. It would be unusual--the first change in either direction of this size since the early 1980s when the System was using a nonborrowed reserve operating procedure. Choice of this option might be seen as compensating for the absence of policy adjustment over recent months. That lack of action--when data indicated surprising strength in the economy and rising levels of resource utilization--probably contributed to the apparent increase in inflation expectations in financial markets.

Such a policy move would not be a complete surprise to markets. It has been discussed by market participants,

who have built into rates some odds that it will occur. Nonetheless, it is not generally expected. As a consequence the market's reaction is especially difficult to predict. There is some risk of an adverse reaction. Markets could build in more aggressive Federal Reserve actions well into the future, perhaps because they saw tightening as now less subject to intense Congressional opposition, raising longer-term real rates quite substantially. And inflation expectations might not be damped much if participants also interpreted the unusual action as suggesting that the Federal Reserve anticipated a more severe inflation problem.. In the bluebook, we saw the more likely outcome as being one in which market reaction was more favorable. The 75 basis point move would damp inflation expectations by quelling market concerns that the Federal Reserve was not prepared to take adequate steps to meet its inflation objectives. Real rates would rise--presumably this is an outcome the Committee would find desirable since it is trying to damp aggregate demand. But the rise in real rates might be contained, both because prompter action would reduce the need for rates to go as high ultimately and because the market might presume that the Committee would require a stronger burden of proof of economic overshooting in the intermeeting period to raise rates in December. In this interpretation, bond markets could rally, especially if the

dollar strengthened significantly--an outcome all the more likely if, in the wake of the recent intervention, the unusual tightening were seen as evidence of concern about the implications of a weak currency and a willingness to act on that concern.

Does the recent behavior of money and credit argue for the less aggressive tightening action? Several of you mentioned slow money growth at the last Committee meeting as providing a degree of comfort that policy was not positioned to support a sizable, permanent increase in inflation. Since then, M1 and M2 seem to be weakening further, and are coming in under the staff projections at the last meeting. We now see M1 as going from a 2-3/4 percent rate of growth in the third quarter to minus 3 percent in the fourth. M2, which increased at a 3/4 percent pace in the third quarter, looks as if it will be declining at a 1 percent rate in the fourth. The sluggish behavior of the aggregates this year is primarily a result of the rise in market interest rates and the reluctance of depositories to increase retail deposit offering rates. However, the extent of the very recent weakness is something of a mystery, especially after taking account of flagging inflows to longer-term mutual funds.

As to the indicator value of these measures, M1 is especially interest sensitive, and hence its velocity has



been highly variable ever since NOW accounts were authorized. As a consequence, the indicator value of this aggregate and the associated reserve measures has been small. M2 is less interest sensitive--but it does respond to changes in market rates, and as you are well aware, the demand for this aggregate has been subject to shifting asset preferences as households adapt to the easier availability of a wider array of financial assets. Looking back over the postwar period, it would be quite unusual to have a sustained pickup in inflation with the monetary aggregates slow and slowing. But market structures are changing, and reliance on these indicators when Phillips curve relationships are flashing warning signals would seem to entail considerable risk.

Moreover, broader measures of money and credit are not showing this weakening tendency. We see M3 growing in the fourth quarter at about the 1-3/4 percent rate of the third--both quarters well above the pace of expansion of the first half of the year. The relative strength in M3 reflects in part more robust loan growth at banks. This growth is being funded by wholesale funds--including large CDs as well as securities sales and nondeposit sources of funds. Some of bank loan growth represents demand shifted from longer-term markets, for home mortgages as well as business finance. But is also a response to easier credit

conditions. Overall, the debt of nonfinancial sectors continues to expand at a moderate pace. To be sure, there is no sign of a "borrow and spend psychology" associated with low real rates and incipient inflation. But there is also no sign of a slowing in credit growth, as might be expected and desired if the FOMC is looking for some moderation in the pace of nominal income growth.